

Result No.	Score	Query Match	Length DB	ID	Description	SUMMARIES
1	2083	100.0	392	15	US-10-424-599-220046	Sequence 220046,
2	2083	100.0	392	16	US-10-734-698A-39	Sequence 39, Appl
3	2083	100.0	392	17	US-10-917-602A-39	Sequence 39, Appl
4	2083	100.0	395	15	US-10-425-114-44212	Sequence 44212, A
5	2083	100.0	395	15	US-10-425-114-44833	Sequence 44833, A
6	2074	99.6	421	15	US-10-425-114-55057	Sequence 55057, A
7	2073	99.5	413	15	US-10-425-114-55057	Sequence 55057, A
8	2073	99.5	414	15	US-10-425-114-43817	Sequence 43817, A
9	2073	99.5	416	15	US-10-425-114-45713	Sequence 45713, A
10	2073	99.5	420	15	US-10-425-114-45878	Sequence 45878, A
11	2073	99.5	420	15	US-10-425-114-55959	Sequence 55959, A

Qy 121 AGDOGHMFGYATDEPEMLPLSHVATLKGARLTTEVKANGTCPWLRPDKGKTVQTYVYYND 180  
 Db 121 AGDOGHMFGYATDEPEMLPLSHVATLKGARLTTEVKANGTCPWLRPDKGKTVQTYVYYND 180

Qy 181 NGANVPVRVHTVLISTODETIVNDELAADLKEHVTKVPIPKYLDKETIIFHLPNSGRFV 240  
 Db 181 NGANVPVRVHTVLISTODETIVNDELAADLKEHVTKVPIPKYLDKETIIFHLPNSGRFV 240

Qy 241 IGGPHGDAGLTGRKLIIDTYGGNGAHCGGFAFSKQDPTKVDRSGAYIVRQAQKSVASGLA 300  
 Db 241 IGGPHGDAGLTGRKLIIDTYGGNGAHCGGFAFSKQDPTKVDRSGAYIVRQAQKSVASGLA 300

Qy 301 RRCIVQVSVAIGVPEPLSVFVDYGTGKIHDEILNWKENDFRPGMISINDLRGCGN 360  
 Db 301 RRCIVQVSVAIGVPEPLSVFVDYGTGKIHDEILNWKENDFRPGMISINDLRGCGN 360

Qy 361 NRFLKTAAYGHFGREDPDTWEVKPLKWEKA 392  
 Db 361 NRFLKTAAYGHFGREDPDTWEVKPLKWEKA 392

RESULT 2  
 US-10-734-698A-39  
 ; Sequence 39, Application US/10734698A  
 ; Publication No. US20040200341A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: FALCO, SAVERIO CARL  
 ; ALLEN, STEPHEN M.  
 ; RAFALSKI, J. ANTONI  
 ; HATZ, WILLIAM D.  
 ; KINNEY, ANTHONY J.  
 ; ABEIL, LYNN N.  
 ; THORPE, CATHERINE J.

TITLE OF INVENTION: PLANT AMINO ACID BIOSYNTHETIC ENZYMES  
 NUMBER OF SEQUENCES: 43  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: E. I. DU PONT DE NEMOURS AND COMPANY

STREET: 1007 MARKET STREET  
 CITY: WILMINGTON  
 STATE: DELAWARE  
 COUNTRY: USA  
 ZIP: 19898

## COMPUTER READABLE FORM:

MEDIUM TYPE: DISKETTE, 3.50 INCH  
 COMPUTER: IBM PC COMPATIBLE  
 OPERATING SYSTEM: MICROSOFT WINDOWS 95  
 SOFTWARE: MICROSOFT WORD VERSION 7.0A  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/10/0734,698A  
 FILING DATE: 12-Dec-2003  
 CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 60/048,771  
 FILING DATE: 6-Jun-1997

ATTORNEY/AGENT INFORMATION:  
 NAME: MAJARIAN, WILLIAM R.  
 REGISTRATION NUMBER: 41-173  
 REFERENCE/DOCKET NUMBER: BB-1087

TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 302-992-4926  
 TELEFAX: 302-773-0164

INFORMATION FOR SEQ ID NO: 39:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 392 amino acids  
 TYPE: amino acid  
 STRANDEDNESS: not relevant  
 TOPOLOGY: linear  
 MOLECULE TYPE: peptide  
 IMMEDIATE SOURCE:  
 CLONE: S2-12b06

SEQUENCE DESCRIPTION: SEQ ID NO: 39:  
 US-10-734-698A-39

Query Match 100.0%; Score 2083; DB 16; Length 392;  
 Best Local Similarity 100.0%; Pred. No. 9.1e-191; Indels 0; Gaps 0;  
 Matches 392; Conservative 0; Mismatches 0;

Qy 1 MAETFLFTSESYNEGHPPDKLCDQISDAVIDACLBOPDSKVACTCTKTNLVMVGEITT 60  
 Db 1 MAETFLFTSESYNEGHPPDKLCDQISDAVIDACLBOPDSKVACTCTKTNLVMVGEITT 60

Qy 61 KANVDYEKIVRDTCTRNIGFVSDVGDADNCKVVLNIEQSPDIAQGVHGHITKRPBEG 120  
 Db 61 KANVDYEKIVRDTCTRNIGFVSDVGDADNCKVVLNIEQSPDIAQGVHGHITKRPBEG 120

Qy 121 AGDQGHMFGYATDEPEMLPLSHVATLKGARLTTEVKANGTCPWLRPDKGKTVQTYVYYND 180  
 Db 121 AGDQGHMFGYATDEPEMLPLSHVATLKGARLTTEVKANGTCPWLRPDKGKTVQTYVYYND 180

Qy 121 AGDQGHMFGYATDEPEMLPLSHVATLKGARLTTEVKANGTCPWLRPDKGKTVQTYVYYND 180  
 Db 121 AGDQGHMFGYATDEPEMLPLSHVATLKGARLTTEVKANGTCPWLRPDKGKTVQTYVYYND 180

Qy 181 NGAMVPVRVHTVLISTODETIVNDELAADLKEHVTKVPIPKYLDKETIIFHLPNSGRFV 240  
 Db 181 NGAMVPVRVHTVLISTODETIVNDELAADLKEHVTKVPIPKYLDKETIIFHLPNSGRFV 240

Qy 241 IGGPHGDAGLTGRKLIIDTYGGNGAHCGGFAFSKQDPTKVDRSGAYIVRQAQKSVASGLA 300  
 Db 241 IGGPHGDAGLTGRKLIIDTYGGNGAHCGGFAFSKQDPTKVDRSGAYIVRQAQKSVASGLA 300

Qy 301 RRCIVQVSVAIGVPEPLSVFVDYGTGKIHDEILNWKENDFRPGMISINDLRGCGN 360  
 Db 301 RRCIVQVSVAIGVPEPLSVFVDYGTGKIHDEILNWKENDFRPGMISINDLRGCGN 360

Qy 361 NRFLKTAAYGHFGREDPDTWEVKPLKWEKA 392  
 Db 361 NRFLKTAAYGHFGREDPDTWEVKPLKWEKA 392

RESULT 3  
 US-10-917-602A-39  
 ; Sequence 39, Application US/10917602A  
 ; Publication No. US20050120405A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Falco, Saverio Carl  
 ; APPLICANT: Liu, Zhan-Bin  
 ; TITLE OF INVENTION: Plant Amino Acid Biosynthetic Enzymes  
 ; FILE REFERENCE: BB-1087 US CIP  
 ; CURRENT APPLICATION NUMBER: US/10/917,602A  
 ; CURRENT FILING DATE: 2004-08-13  
 ; PRIOR APPLICATION NUMBER: US 10/734698  
 ; PRIOR FILING DATE: 2003-12-12  
 ; PRIOR APPLICATION NUMBER: US 09/424978  
 ; PRIOR FILING DATE: 1999-12-06  
 ; PRIOR APPLICATION NUMBER: PCT/US98/11692  
 ; PRIOR FILING DATE: 1998-06-05  
 ; PRIOR APPLICATION NUMBER: 60/049,443  
 ; PRIOR FILING DATE: 1997-06-12  
 ; PRIOR APPLICATION NUMBER: US 60/048,771  
 ; PRIOR FILING DATE: 1997-06-06  
 ; NUMBER OF SEQ ID NOS: 69  
 ; SOFTWARE: Patentin version 3.1  
 ; SEQ ID NO: 39  
 ; LENGTH: 392  
 ; TYPE: PRT  
 ; ORGANISM: Glycine max  
 ; US-10-917-602A-39

Query Match 100.0%; Score 2083; DB 17; Length 392;  
 Best Local Similarity 100.0%; Pred. No. 9.1e-191; Indels 0; Gaps 0;  
 Matches 392; Conservative 0; Mismatches 0;

Qy 1 MAETFLFTSESYNEGHPPDKLCDQISDAVIDACLBOPDSKVACTCTKTNLVMVGEITT 60  
 Db 1 MAETFLFTSESYNEGHPPDKLCDQISDAVIDACLBOPDSKVACTCTKTNLVMVGEITT 60

Qy 61 KANVDYEKIVRDTCTRNIGFVSDVGDADNCKVVLNIEQSPDIAQGVHGHITKRPBEG 120



APPLICANT: Kovalic, David K.  
 APPLICANT: Screen, Steven E  
 APPLICANT: Tabaska, Jack E  
 APPLICANT: Cao, Yongwei  
 TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With Plants and Uses Thereof for Plant Improvement  
 FILE REFERENCE: 38-21(53313)B  
 CURRENT APPLICATION NUMBER: US/10/425,114  
 CURRENT FILING DATE: 2003-04-28  
 SEQ ID NO: 55424  
 LENGTH: 421  
 TYPE: PRT  
 ORGANISM: Glycine max  
 FEATURE:  
 OTHER INFORMATION: Clone ID: UC-GMFLMINSOY064D01\_FLI.pep  
 US-10-425-114-55424

Query Match 99.6%; Score 2074; DB 15; Length 421;  
 Best Local Similarity 99.4e-150; Pred. No. 8.9e-190;  
 Matches 390; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MAETPLFSESYNEGHPKLCDQISDAVLDACLEQDPDSKVACETCTKTNLVMVGEITT 60  
 Db 22 MAETPLFSESYNEGHPKLCDQISDAVLDACLEQDPDSKVACETCTKTNLVMVGEITT 81  
 Qy 61 KANVDYEKIVRDTCRNIGFVSNNDVGLDADNCVKLVNIHQSPDIAGVAGHLTKRPEBIG 120  
 Db 82 KANVDYEKIVRDTCRNIGFVSNNDVGLDADNCVKLVNIHQSPDIAGVAGHLTKRPEBIG 141  
 Qy 121 AGDQGMFGYATDETPLEMPLSHVATLGARLTVERKNGTCPWLRPDGKTQVTVEYYND 180  
 Db 142 AGDQGMFGYATDETPLEMPLSHVATLGARLTVERKNGTCPWLRPDGKTQVTVEYYND 201  
 Qy 181 NGAMYPVRVTVLISSTQHDETYNTDEIAADLKEHVTKPVIPKYLDEKTIIFHLPNSGRFV 240  
 Db 202 NGARVPVRVTVLISSTQHDETYNTDEIAADLKEHVTKPVIPKYLDEKTIIFHLPNSGRFV 261  
 Qy 241 IGGPHDAGLTGRKLIIDTGGWGAHGGAFSGKOPTKDRSGAVYVROAKSIVASGLA 300  
 Db 262 IGGPHDAGLTGRKLIIDTGGWGAHGGAFSGKOPTKDRSGAVYVROAKSIVASGLA 321  
 Qy 301 RRCIVQSYAIGVPPEPLSVFVDTYGTGKIHDKELNIVKENFDFFPGMISINLDLRKGN 360  
 Db 322 RRCIVQSYAIGVPPEPLSVFVDTYGTGKIHDKELNIVKENFDFFPGMISINLDLRKGN 381

RESULT 8  
 Sequence 43817, Application US/10425114  
 Publication No. US2004034888A1  
 GENERAL INFORMATION:  
 APPLICANT: Liu, Jingdong  
 APPLICANT: Zhou, Yihua  
 APPLICANT: Kovacic, David K.  
 APPLICANT: Screen, Steven E  
 APPLICANT: Tabaska, Jack E  
 APPLICANT: Cao, Yongwei  
 TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With Plants and Uses Thereof for Plant Improvement  
 FILE REFERENCE: 38-21(53313)B  
 CURRENT FILING DATE: 2003-04-28  
 NUMBER OF SEQ ID NOS: 73128  
 SEQ ID NO: 43817  
 LENGTH: 414  
 TYPE: PRT  
 FEATURE:  
 OTHER INFORMATION: Clone ID: 700649684\_FLI.pep  
 US-10-425-114-55057

Query Match 99.5%; Score 2073; DB 15; Length 414;  
 Best Local Similarity 99.2%; Pred. No. 9e-190; Mismatches 1; Indels 0; Gaps 0;

Qy 1 MAETPLFSESYNEGHPKLCDQISDAVLDACLEQDPDSKVACETCTKTNLVMVGEITT 60  
 Db 23 MAETPLFSESYNEGHPKLCDQISDAVLDACLEQDPDSKVACETCTKTNLVMVGEITT 82  
 Qy 61 KANVDYEKIVRDTCRNIGFVSNNDVGLDADNCVKLVNIHQSPDIAGVAGHLTKRPEBIG 120  
 Db 83 KANVDYEKIVRDTCRNIGFVSNNDVGLDADNCVKLVNIHQSPDIAGVAGHLTKRPEBIG 142  
 LENGTH: 413  
 TYPE: PRT  
 ORGANISM: Glycine max  
 FEATURE:

Query 121 AGDQHMFGYATDEPELMPSHVLAATKGLARLTERVKNGTCPWLRPDGKTVQTYVBYND 180  
 Database 143 AGDQHMFGYATDEPELMPSHVLAATKGLARLTERVKNGTCPWLRPDGKTVQTYVBYND 202  
 Query 181 NGAMYPVRVHTVLISTQHDETNTDEIAADLKERYIKPVIPKEVDEKTLFHLNPSGRFV 240  
 Database 203 NGARVPIRVHVTVLISTQHDETNTDEIAADLKERYIKPVIPKEVDEKTLFHLNPSGRFV 262  
 Result 10 US-10-425-114-4587B  
 Query 241 IGGPHDAGLTGRKLIIDTYCGWAHGGAFAKGSKDPTKVDRGAYIVROAKSIVASGLA 300  
 Database 263 IGGPHDAGLTGRKLIIDTYCGWAHGGAFAKGSKDPTKVDRGAYIVROAKSIVASGLA 322  
 Query 301 RCTIVQSYAIGVPEPLSVFTDTGKINDKEILNIVENFDPRGMISINLDLKRGGN 360  
 Database 323 RCTIVQSYAIGVPEPLSVFTDTGKINDKEILNIVENFDPRGMISINLDLKRGGN 382  
 Query 361 NRLFKAAYGHFREDPDTWEVVKPLKWEKA 392  
 Database 383 NRLFKAAYGHFREDPDTWEVVKPLKWEKA 414

Query 9 US-10-425-114-45713  
 Sequence 45713, Application US/10425114  
 Publication No. US20040034888A1  
 General Information:  
 APPLICANT: Liu, Jingdong  
 APPLICANT: Zhou, Yihua  
 APPLICANT: Kovalic, David K.  
 APPLICANT: Screen, Steven E.  
 APPLICANT: Tabaska, Jack E.  
 APPLICANT: Cao, Yongwei  
 Title of Invention: Nucleic Acid Molecules and Other Molecules Associated With  
 Title of Invention: Plants and Uses Thereof for Plant Improvement  
 File Reference: 38-21(5313)B  
 Current Application Number: US/10/425,114  
 Current Filing Date: 2003-04-28  
 Number of SEQ ID Nos: 73128  
 SEQ ID No 45878  
 Length: 420  
 Type: PRT  
 Organism: Glycine max  
 Feature:  
 Other Information: Clone ID: 701040251\_FLI.pep  
 US-10-425-114-4587B

Query Match 99.5%; Score 2073; DB 15; Length 420;  
 Best Local Similarity 99.2%; Pred. No. 9.2e-190;  
 Matches 389; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Query 1 MAEFLFLTSESVNEGHPKLQCDQISDAVLDACLEQDPDSKVACETCTKTNLYMVEGETT 60  
 Database 29 MAEFLFLTSESVNEGHPKLQCDQISDAVLDACLEQDPDSKVACETCTKTNLYMVEGETT 88  
 Query 61 KANVDEYKEIVRDTCRNIGEVNSNDVGLADNCKVLVNIBQSPDIAQGVIGHLTKRPEEIG 120  
 Database 89 KANVDEYKEIVRDTCRNIGEVNSNDVGLADNCKVLVNIBQSPDIAQGVIGHLTKRPEEIG 148  
 Query 121 AGDQHMFGYATDEPELMPSHVLAATKGLARLTERVKNGTCPMLRPDKTQTYVBYND 180  
 Database 149 AGDQHMFGYATDEPELMPSHVLAATKGLARLTERVKNGTCPMLRPDKTQTYVBYND 208  
 Query 181 NGAMYPVRVHTVLISTQHDETNTDEIAADLKERYIKPVIPKEVDEKTLFHLNPSGRFV 240  
 Database 209 NGARVPIRVHVTVLISTQHDETNTDEIAADLKERYIKPVIPKEVDEKTLFHLNPSGRFV 268  
 Query 241 IGGPHDAGLTGRKLIIDTYCGWAHGGAFAKGSKDPTKVDRGAYIVROAKSIVASGLA 300  
 Database 269 IGGPHDAGLTGRKLIIDTYCGWAHGGAFAKGSKDPTKVDRGAYIVROAKSIVASGLA 328  
 Query 301 RCTIVQSYAIGVPEPLSVFTDTGKINDKEILNIVENFDPRGMISINLDLKRGGN 360  
 Database 329 RCTIVQSYAIGVPEPLSVFTDTGKINDKEILNIVENFDPRGMISINLDLKRGGN 388  
 Query 361 NRLFKAAYGHFREDPDTWEVVKPLKWEKA 392  
 Database 389 NRLFKAAYGHFREDPDTWEVVKPLKWEKA 420

Result 11 US-10-425-114-55599  
 Sequence 55599, Application US/10425114  
 Publication No. US20040034888A1  
 General Information:  
 APPLICANT: Liu, Jingdong  
 APPLICANT: Zhou, Yihua  
 APPLICANT: Kovalic, David K.  
 APPLICANT: Screen, Steven E.  
 APPLICANT: Tabaska, Jack E.  
 APPLICANT: Cao, Yongwei

Query 241 IGGPHDAGLTGRKLIIDTYCGWAHGGAFAKGSKDPTKVDRGAYIVROAKSIVASGLA 300  
 Database 265 IGGPHDAGLTGRKLIIDTYCGWAHGGAFAKGSKDPTKVDRGAYIVROAKSIVASGLA 324  
 Query 301 RCTIVQSYAIGVPEPLSVFTDTGKINDKEILNIVENFDPRGMISINLDLKRGGN 360  
 Database 325 RCTIVQSYAIGVPEPLSVFTDTGKINDKEILNIVENFDPRGMISINLDLKRGGN 384

APPLICANT: Tabaska, Jack E  
 APPLICANT: Cao, Yongwei  
 TITLE OF INVENTION: Plants and Other Molecules and Other Molecules Associated With  
 FILE REFERENCE: 38-21(5313)B  
 CURRENT FILING DATE: 2003-04-28  
 NUMBER OF SEQ ID NOS: 73128  
 SEQ ID NO 55959  
 LENGTH: 420  
 TYPE: PRT  
 ORGANISM: Glycine max  
 FEATURE: OTHER INFORMATION: Clone ID: 7011231183\_FLI.pep  
 US-10-425-114-55959

Query Match Score 2073; DB 15; Length 421;  
 Best Local Similarity 99.5%; Pred. No. 9.2e-190;  
 Matches 389; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 1 MAETLFTSSEVNECHPDKLCDQISDAVLDACLEQDPSKVAEETCTKTNLYMVEIT 60  
 Db 30 MAETLFTSSEVNECHPDKLCDQISDAVLDACLEQDPSKVAEETCTKTNLYMVEIT 89

Qy 61 KANVDEYKIVRDTCRNIGFVSNDVGLDADNCVLYNIEQOSPDIAQGVGHHLTKRPEEIG 120  
 Db 90 KANVDEYKIVRDTCRNIGFVSNDVGLDADNCVLYNIEQOSPDIAQGVGHHLTKRPEEIG 149

Qy 121 AGDOGHMFGYATDETPEMLPLSHVATLGARLTENVKNGTCPWLRPDGKTQVTVEYYND 180  
 Db 150 AGDOGHMFGYATDETPEMLPLSHVATLGARLTENVKNGTCPWLRPDGKTQVTVEYYND 209

Qy 181 NGAMVPVRVHTVLISTQHDETIVNDEIAADLKEHVTKPVIPKYLDEKTIIFHLNPGRFV 240  
 Db 210 NGARPVIRVHTVLISTQHDETIVNDEIAADLKEHVTKPVIPKYLDEKTIIFHLNPGRFV 269

Qy 241 IGGPHGDAGLTGRKIIIDTYGGHGGAFSGKDPPTKVDGAYTVAQAKSTVAGLA 300  
 Db 270 IGGPHGDAGLTGRKIIIDTYGGHGGAFSGKDPPTKVDGAYTVAQAKSTVAGLA 329

Qy 301 RRCIVQSYAIGVPBPLSVFDVTYGTGKTHDEKTLINIVENFDPRGMISINLDLKRGN 360  
 Db 330 RRCIVQSYAIGVPBPLSVFDVTYGTGKTHDEKTLINIVENFDPRGMISINLDLKRGN 389

Qy 361 NRFLKTAAYGFGRDPPDFTEVVKPLKWEKA 392  
 Db 390 NRFLKTAAYGFGRDPPDFTEVVKPLKWEKA 421

RESULT 13  
 US-10-425-114-46284  
 ; Sequence 46284, Application US/10425114  
 ; Publication No. US20040034888A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Liu, Jingdong  
 ; APPLICANT: Zhou, Yihua  
 ; APPLICANT: Kovacic, David K.  
 ; APPLICANT: Screen, Steven E.  
 ; APPLICANT: Tabaska, Jack E  
 ; APPLICANT: Cao, Yongwei  
 ; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With  
 ; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement  
 ; FILE REFERENCE: 38-21(5313)B  
 ; CURRENT APPLICATION NUMBER: US/10/425,114  
 ; CURRENT FILING DATE: 2003-04-28  
 ; NUMBER OF SEQ ID NOS: 73128  
 ; SEQ ID NO 46284  
 ; LENGTH: 421  
 ; TYPE: PRT  
 ; ORGANISM: Glycine max  
 ; FEATURE:  
 ; OTHER INFORMATION: Clone ID: 701137731\_FLI.pep  
 US-10-425-114-46284

Query Match Score 2073; DB 15; Length 421;  
 Best Local Similarity 99.5%; Pred. No. 9.2e-190;  
 Matches 389; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 1 MAETLFTSSEVNECHPDKLCDQISDAVLDACLEQDPSKVAEETCTKTNLYMVEIT 60  
 Db 30 MAETLFTSSEVNECHPDKLCDQISDAVLDACLEQDPSKVAEETCTKTNLYMVEIT 89

Qy 61 KANVDEYKIVRDTCRNIGFVSNDVGLDADNCVLYNIEQOSPDIAQGVGHHLTKRPEEIG 120  
 Db 90 KANVDEYKIVRDTCRNIGFVSNDVGLDADNCVLYNIEQOSPDIAQGVGHHLTKRPEEIG 149

Qy 121 AGDOGHMFGYATDETPEMLPLSHVATLGARLTENVKNGTCPWLRPDGKTQVTVEYYND 180



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OM protein - protein search, using sw model

Run on: September 12, 2005, 14:28:42 ; Search time 30 Seconds (without alignments)

975.414 Million cell updates/sec

Title: US-10-734-698A-39  
Perfect score: 2033  
Sequence: 1 MAETFLIFTSESVNEGHDPKU.....GREDDFTWEVKPLKWEKA 392

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 513545 seqs, 74649064 residues

Total number of hits satisfying chosen parameters: 513545

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA:  
1: /cgm2\_6\_ptodata/1/iaa/5A\_COMB.pep:  
2: /cgm2\_6\_ptodata/1/iaa/5B\_COMB.pep:  
3: /cn2\_6\_ptodata/1/iaa/6A\_COMB.pep:  
4: /cg2\_6\_ptodata/1/iaa/6B\_COMB.pep:  
5: /cgm2\_6\_ptodata/1/iaa/BCTUS\_COMBO.pep:  
6: /cgm2\_6\_ptodata/1/iaa/backfile1.pep:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Query	Score	Match	Length	DB ID	Description
1	2083	100.0	392	4	US-03-424-978B-39	Sequence 39, App1
2	1946	93.4	396	4	US-09-424-978B-36	Sequence 36, App1
3	1891.5	90.8	394	4	US-09-424-978B-42	Sequence 42, App1
4	1316.5	63.2	395	4	US-09-976-5934-471	Sequence 471, App1
5	1316.5	63.2	416	4	US-09-949-016-10059	Sequence 10059, App1
6	1280.5	61.5	390	4	US-09-248-796A-18235	Sequence 18235, App1
7	1274.5	61.2	395	4	US-09-949-016-5938	Sequence 5939, App1
8	1274.5	61.2	401	4	US-09-949-016-7658	Sequence 7658, App1
9	1102	52.9	404	4	US-09-107-532A-6821	Sequence 6821, App1
10	1086	52.1	387	4	US-09-543-681A-7130	Sequence 7130, App1
11	1068.5	51.3	385	4	US-09-489-039A-11917	Sequence 11917, App1
12	1062.5	51.0	396	4	US-09-583-110-2778	Sequence 2778, App1
13	1062.5	51.0	405	4	US-09-107-433-2830	Sequence 2830, App1
14	1061.5	51.0	396	3	US-09-273-686-2	Sequence 2, App1
15	1055	50.6	395	4	US-09-328-552-6660	Sequence 6660, App1
16	1042.5	50.0	415	3	US-09-134-001C-5077	Sequence 5077, App1
17	1040	49.9	388	4	US-09-540-236-344	Sequence 3444, App1
18	1028.5	49.4	402	2	US-08-403-852D-19	Sequence 19, App1
19	1028.5	49.4	402	3	US-08-510-646B-20	Sequence 20, App1
20	1028.5	49.4	402	3	US-09-231-818-19	Sequence 19, App1
21	1028.5	49.4	402	4	US-09-635-359B-19	Sequence 19, App1
22	1006	48.3	407	3	US-08-955-107A-2	Sequence 2, App1
23	1000.5	48.0	401	4	US-09-252-991A-19899	Sequence 19899, App1
24	832	39.9	332	3	US-09-320-878-16	Sequence 16, App1
25	832	39.9	332	4	US-09-141-908-20	Sequence 20, App1
26	832	39.9	313	4	US-09-657-440-16	Sequence 16, App1
27	803.5	38.6	313	4	US-09-902-540-10716	Sequence 10716, App1

## ALIGNMENTS

RESULT 1  
US-09-424-978B-39  
; Sequence 39, Application US/09424978B  
; Patent No. 666445

; GENERAL INFORMATION:

; APPLICANT: Falco, Saverio Carl  
; ALLEN, Stephen M.  
; RAFALESKI, J. Antoni  
; HITZ, William D.  
; KINNEY, Anthony J.  
; ABELL, Lynne N.  
; THORPE, Catherine J.  
; TITLE OF INVENTION: Plant Amino Acid Biosynthetic Enzymes  
; FILE REFERENCE: BB-1087  
; CURRENT APPLICATION NUMBER: US/09/424,978B  
; CURRENT FILING DATE: 1999-12-02  
; PRIORITY NUMBER: US 60/048, 771  
; PRIORITY FILING DATE: 1997-06-06  
; NUMBER OF SEQ ID NOS: 43  
; SOFTWARE: PatentIn version 3.1  
; SEQ ID NO 39  
; LENGTH: 392  
; TYPE: PRT  
; ORGANISM: Glycine max  
US-09-424-978B-39

Query Match 100.0%; Score 2083; DB 4; Length 392;  
Best Local Similarity 100.0%; Pred. No. 4.1e-212;  
Matches 392; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Query Match 100.0%; Score 2083; DB 4; Length 392;  
Best Local Similarity 100.0%; Pred. No. 4.1e-212;  
Matches 392; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MAETFLIFTSESVNEGHDPKU.....GREDDFTWEVKPLKWEKA 392  
Db 1 MAETFLIFTSESVNEGHDPKU.....GREDDFTWEVKPLKWEKA 392

Qy 1 KANVDYEVKIVDTCRNIGFVNDVGLADNCKVLUNIEQSPDIAQGVHGLTKRPEBIG 120  
Db 1 KANVDYEVKIVDTCRNIGFVNDVGLADNCKVLUNIEQSPDIAQGVHGLTKRPEBIG 120

Qy 1 AGDQGHMFQYATDETPELMPFLSHVLAULKARLTYRKNGTCPWLRPDGKTHQVTVEYND 180  
Db 1 AGDQGHMFQYATDETPELMPFLSHVLAULKARLTYRKNGTCPWLRPDGKTHQVTVEYND 180

Qy 1 NGAMPVPRVHTVYLISTOHDETYNTNDEADLKHEVTKPVPIKEKYLDKTIFLHNLPNSGRFV 240  
Db 1 NGAMPVPRVHTVYLISTOHDETYNTNDEADLKHEVTKPVPIKEKYLDKTIFLHNLPNSGRFV 240

Qy 1 IGGPHGDAGLTGRKIIIDTYGGWGAHGGGAFSGKDPTKDRSGATVROAKSIVASGLA 300  
Db 1 IGGPHGDAGLTGRKIIIDTYGGWGAHGGGAFSGKDPTKDRSGATVROAKSIVASGLA 300

Qy 1 IGGPHGDAGLTGRKIIIDTYGGWGAHGGGAFSGKDPTKDRSGATVROAKSIVASGLA 300  
Db 1 IGGPHGDAGLTGRKIIIDTYGGWGAHGGGAFSGKDPTKDRSGATVROAKSIVASGLA 300

RESULT 2

US-09-124-978B-36

Sequence 36, Application US/09424978B

GENERAL INFORMATION:

APPLICANT: Falco, Saverio Carl

APPLICANT: Allen, Stephen M.

APPLICANT: Rafalski, J. Antoni

APPLICANT: Hitz, William D.

APPLICANT: Kinney, Anthony J.

APPLICANT: Abell, Lynne N.

APPLICANT: Thorpe, Catherine J.

TITLE OF INVENTION: Plant Amino Acid Biosynthetic Enzymes

FILE REFERENCE: BB-1087

CURRENT APPLICATION NUMBER: US/09/424,978B

CURRENT FILING DATE: 1999-12-02

PRIOR APPLICATION NUMBER: US 60/048,771

PRIOR FILING DATE: 1997-06-06

NUMBER OF SEQ ID NOS: 43

SOFTWARE: PatentIn version 3.1

SEQ ID NO 42

LENGTH: 394

TYPE: PRT

ORGANISM: Triticum aestivum

US-09-424-978B-42

Query Match Score 1891.5; Pred. No. 8.7e-192;

Best Local Similarity 90.8%; Mismatches 18; Indels 1; Gaps 1;

Matches 355; Conservative 18;

Query 2 AETFLFTSESYNEGHFDPKLQCDQISDAVLDALEQDPSKVACETCTKTNLYMVFGHITTK 61

Db 3 AETFLFTSESYNEGHFDPKLQCDQVSDAVLDAQADSKVACETCTKTNMVFLGHTTK 62

Query 62 ANVDYEKIVRDTCRNIGFVNDVGLDADNCVKLVNIEQSPDIAQGVHGHLTKRPEEIGA 121

Db 63 ATVDYEKIVRDTCRNIGFISDDVGLDADRCVKLVNIEQSPDIAQGVHGHFTKRPEEVEGA 122

Query 122 GDQHMGFQYATDETEPMLPSHVLAFLKGARLTERKNGTCPWLREDGKTOVTVEYNDN 181

Db 123 GDQHMGFQYATDETEPMLPKHVLAFLKGARLTERKNGCAWREDGKTOVTVEYLNED 182

Query 182 GAMVPVRVHTVLISTOHDETVTNDEAADIKEHVKPVIPKYLDEKTIFHLPNSGRFV 241

Db 183 GAMVPVRVHTVLISTOHDETVTNDEAADIKEHVKPVIPKYLDEKTIFHLPNSGRFV 242

Query 242 GGPHGDAGLTKRKLIDTYGGWGAHGGAFSGKDPTKVDRSGAYVROQAKSIVASGLAR 301

Db 243 GGPHGDAGLTKRKLIDTYGGWGAHGGAFSGKDPTKVDRSGAYVROQAKSIVASGLAR 302

Query 302 RCIVQSYAIGVPEPSVFDYTGKTHDEKILIVKENDFPRPGMISNDLRRGNN 361

Db 303 RCIVQSYAIGVPEPSVFDYTGKTHDEKILIVKENDFPRPGMISNDLRRGNN-N 361

Query 362 RFLKTAAYGHFGRDPPDFTWEVKPLKWKWEA 392

Db 362 RFLKTAAYGHFGRDADFTWEVKPLKFDKA 392

RESULT 4

US-09-976-594-471

Sequence 471, Application US/09976594

Patent No. 6673549

GENERAL INFORMATION:

APPLICANT: Furness, Michael

APPLICANT: Buchbinder, Jenny

TITLE OF INVENTION: GENES EXPRESSED IN C3A LIVER CELL CULTURES TREATED WITH STEROIDS

FILE REFERENCE: PA-0041 US

CURRENT APPLICATION NUMBER: US/09/976,594

CURRENT FILING DATE: 2001-10-12

PRIOR APPLICATION NUMBER: 60/240,409

PRIOR FILING DATE: 2000-10-12

NUMBER OF SEQ ID NOS: 1143

SOFTWARE: PERL Program

SEQ ID NO 471

LENGTH: 395

TYPE: PRT

ORGANISM: Homo sapiens

GENERAL INFORMATION:

RESULT 3

US-09-424-978B-42

Sequence 42, Application US/09424978B

Patent No. 6664445

FEATURE: misc feature  
 OTHER INFORMATION: Incyte ID No. 6673549 2600262CD1  
 US-09-976-594-471

Query Match Score 1316.5; DB 4; Length 395;  
 Best Local Similarity 65.8%; Pred. No. 9.2e-131;  
 Matches 254; Conservative 49; Mismatches 76; Indels 3;

Qy 4 TELFTSESYNEGHDPDKLQDISDAVLDACLEQDPSKACETCTKTNLVMVGEITKAN 63  
 Db 17 TELFTSESYGEHGPDKICQDISDAVLDAHLQQDPDAKACETVAKTGMILLAGEITSRAA 76  
 Qy 64 VDYEKIVRDTCRNFGVSNNDVGLADDNCKVLYNEQQSPDIAGSVRGLTRKPEEIGAGD 123  
 Db 77 VDQKVKVREAVKHIGYDSSKGDPYKTCNVLVALEQQSPDIAGV - HLDNEEDIGAGD 134  
 Qy 124 QHMFGYATDETECMLPMSHVLAATKLGRSLTEVRKGNTCPWLRPDKTQVTVYNNNGA 183  
 Db 135 QHMFGYATDETECMLPMSHVLAATKLGRSLTEVRKGNTCPWLRPDSKIQVTVQMDRGA 194  
 Qy 184 MVPVVHFTVLISQHDETYNDEAIDLKEHYIKPVIEPEKYLDEKTIFHLNPSGREVIGG 243  
 Db 195 VLPVRVHTIVISQHDEVCMLPMSHVLAATKLGRSLTEVRKGNTCPWLRPDSKIQVTVQMDRGA 254

RESULT 6  
 US-09-248-796A-18255  
 ; Sequence 18255, Application US/09248796A  
 ; Patent No. 6747137  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Keith Weinstock et al  
 ; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICAN  
 ; TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS  
 ; FILE REFERENCE: 107196.132  
 ; CURRENT APPLICATION NUMBER: US/09/248,796A  
 ; CURRENT FILING DATE: 1999-02-12  
 ; PRIOR APPLICATION NUMBER: US 60/074,725  
 ; PRIOR FILING DATE: 1998-02-13  
 ; PRIOR APPLICATION NUMBER: US 60/096,409  
 ; PRIOR FILING DATE: 1998-08-13  
 ; NUMBER OF SEQ ID NOS: 28208  
 ; SEQ ID NO 18255  
 ; LENGTH: 390  
 ; TYPE: PRT  
 ; ORGANISM: Candida albicans  
 US-09-248-796A-18255

RESULT 5  
 US-09-949-016-10059  
 ; Sequence 10059, Application US/09949016  
 ; Patent No. 6812339  
 ; GENERAL INFORMATION:  
 ; APPLICANT: VENTER, J. Craig et al.  
 ; TITLE OF INVENTION: METHODS OF DETECTION AND USES THEREOF  
 ; CURRENT APPLICATION NUMBER: US/09/949,016  
 ; CURRENT FILING DATE: 2000-09-14  
 ; PRIOR APPLICATION NUMBER: 60/241,755  
 ; PRIOR FILING DATE: 2000-10-20  
 ; PRIOR APPLICATION NUMBER: 60/237,768  
 ; PRIOR FILING DATE: 2000-10-03  
 ; PRIOR APPLICATION NUMBER: 60/231,498  
 ; PRIOR FILING DATE: 2000-09-08  
 ; NUMBER OF SEQ ID NOS: 207012  
 ; SOFTWARE: FastSEQ for Windows Version 4.0  
 ; SEQ ID NO 10059  
 ; LENGTH: 416  
 ; TYPE: PRT  
 ; ORGANISM: Human  
 US-09-949-016-10059

Query Match Score 1316.5; DB 4; Length 416;  
 Best Local Similarity 65.8%; Pred. No. 1e-130;  
 Matches 254; Conservative 49; Mismatches 76; Indels 7; Gaps 3;

Qy 4 TELFTSESYNEGHDPDKLQDISDAVLDACLEQDPSKACETCTKTNLVMVGEITKAN 63  
 Db 38 TELFTSESYGEHGPDKICQDISDAVLDAHLQQDPDAKACETVAKTGMILLAGEITSRAA 97  
 Qy 64 VDYEKIVRDTCRNFGVSNNDVGLADDNCKVLYNEQQSPDIAGSVRGLTRKPEEIGAGD 123

Db 98 VDQKVKVREAVKHIGYDSSKGFDYKTCNVLVALEQQSPDIAGV - HLDNEEDIGAGD 155  
 Qy 124 QHMFGYATDETECMLPMSHVLAATKLGRSLTEVRKGNTCPWLRPDKTQVTVYNNNGA 183  
 Db 156 QHMFGYATDETECMLPMSHVLAATKLGRSLTEVRKGNTCPWLRPDKTQVTVQMDRGA 215  
 Qy 184 MVPVVHFTVLISQHDETYNDEAIDLKEHYIKPVIEPEKYLDEKTIFHLNPSGREVIGG 243  
 Db 216 VLPVRVHTIVISQHDEVCMLPMSHVLAATKLGRSLTEVRKGNTCPWLRPDSKIQVTVQMDRGA 275  
 Qy 244 PHDAGLITGRKIIIDYGGWAHGGAFFSGKGDPTKDRGAVIVROAKSIVASGLARRC 303  
 Db 276 PQDAGLITGRKIIIDYGGWAHGGAFFSGKGDPTKDRSAAAYARVAKSLVKGGLCRRV 335  
 Qy 304 IVQSYAIGVPEPLSVFVDITYGTGKTHDEKTINVGENFDFRPGMISINLDLURGGNNRF 363  
 Db 336 LVQSYAIGVSHPLSISIPHYGTSQSBRILLEIVKGNFDLRPGVIVRDLDLK---PIY 392  
 Qy 364 LKTAAYGFGRDPDFEWVVKPLKW 389  
 Db 393 QRTAAYGFGRD--SFPEVPKLKY 416

RESULT 7  
 US-09-248-796A-18255  
 ; Sequence 18255, Application US/09248796A  
 ; Patent No. 6747137  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Keith Weinstock et al  
 ; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICAN  
 ; TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS  
 ; FILE REFERENCE: 107196.132  
 ; CURRENT APPLICATION NUMBER: US/09/248,796A  
 ; CURRENT FILING DATE: 1999-02-12  
 ; PRIOR APPLICATION NUMBER: US 60/074,725  
 ; PRIOR FILING DATE: 1998-02-13  
 ; PRIOR APPLICATION NUMBER: US 60/096,409  
 ; PRIOR FILING DATE: 1998-08-13  
 ; NUMBER OF SEQ ID NOS: 28208  
 ; SEQ ID NO 18255  
 ; LENGTH: 390  
 ; TYPE: PRT  
 ; ORGANISM: Candida albicans  
 US-09-248-796A-18255

Query Match Score 1280.5; DB 4; Length 390;  
 Best Local Similarity 62.5%; Pred. No. 6e-127;  
 Matches 242; Conservative 56; Mismatches 82; Indels 7; Gaps 3;

Qy 3 ETPLFTSESYNEGHDPDKLQDISDAVLDACLEQDPSKACETCTKTNLVMVGEITKKA 62  
 Db 11 ETPLFTSESYGEHGPDKICQDISDAVLDACLAVDPLSKVACATAKTMIMVGEITKKA 70  
 Qy 63 NVDEYEKIVRDTCRNFGVSNNDVGLADDNCKVLYNEQQSPDIAGSVRGLTRKPEEIGAG 122  
 Db 71 QLDYQKIRDTHKIGYDDSEKGPDIYKTCNVLVALEQQSPDIAGL - HYEKALEBLGAG 128  
 Qy 123 DOGHMFGYATDETECMLPMSHVLAATKLGRSLTEVRKGNTCPWLRPDKTQVTVYNNNG 182  
 Db 129 DOGIMFGYATDDEKPLTLLAKLNAALASARSGLSPWLRPDKTQVTVYKDDG 188  
 Qy 183 AMVPVVFHTVLISQHDETYNDEAIDLKEHYIKPVIEPEKYLDEKTIFHLNPSGREVIG 242  
 Db 189 AVPKRVDTIVISTQAEETTENKELEHIIKQVTPHEHLDKTIYHQPSGRFVIG 248  
 Qy 243 GPBDAGLITGRKIIIDYGGWAHGGAFFSGKGDPTKDRGAVIVROAKSIVASGLARR 302  
 Db 249 GPQDAGLITGRKIIIDYGGWAHGGAFFSGKGDPSKVDRSAAAYARVAKSLVTAGLAKR 308  
 Qy 303 CIVQSYAIGVPEPLSVFVDITYGTGKTHDEKTINVGENFDFRPGMISINLDLURGGNNRF 362  
 Db 309 ALVQSYAIGVAPTSIYDRTGSKLSTEALVBIKANFDLRPGVIVKELDLAR---PI 365

RESULT 7  
US-09-949-016-5939  
; Sequence 5939, Application US/09949016  
; GENERAL INFORMATION:  
; APPLICANT: VENTER, J. Craig et al.  
; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF  
; FILE REFERENCE: CLO01307  
; CURRENT FILING DATE: 2000-04-14  
; PRIOR APPLICATION NUMBER: 60/231,498  
; PRIOR FILING DATE: 2000-10-03  
; PRIOR FILING DATE: 2000-10-03  
; PRIOR FILING DATE: 2000-09-08  
; NUMBER OF SEQ ID NOS: 207012  
; SOFTWARE: Part-SEQ for Windows Version 4.0  
; SEQ ID NO: 5939  
; LENGTH: 395  
; TYPE: PRT  
; ORGANISM: Human  
; US-09-949-016-5939

Query Match 61.2%; Score 1274.5; DB 4; Length 401;  
Best Local Similarity 62.9%; Pred. No. 2.6e-126;  
Matches 241; Conservative 61; Mismatches 74; Indels 7; Gaps 3;

Qy 5 FLFTSESYNEGHDPDKLQDQISDAVLDACLEQDPDSKVACETCTKTNLYMVGETITKANV 64  
Db 24 FMFTSESVGEHDPKICDQISDAVLDAHLKQDPNKAVALCCKGVLGEITSMAMV 83

Qy 5 FLFTSESYNEGHDPDKLQDQISDAVLDACLEQDPDSKVACETCTKTNLYMVGETITKANV 64  
Db 24 FMFTSESVGEHDPKICDQISDAVLDAHLKQDPNKAVALCCKGVLGEITSMAMV 83

Qy 65 DYKEKIVRDTCRNIGVSNDVGLDAONCKVLYNIEQSPDIAQVGHHLTKRPEEAGDQ 124  
Db 84 DYQRVYRDTKHGDYDDSAKGFDFTCNVLYALBQSPDIAQCV--HLDRNEEDVGADQ 141

Qy 125 GHMFGYATDEPFLMPLSHVLAATKCGARLTVEKNGTCPLRPOCKTQTVTEYYNDGAM 184  
Db 142 GLMFGYATDEECPMLTILAKLNARMADLRSGLLPMPNRDSDKTQTVQYMDNGAV 201

Qy 185 VPVRHTVLISTQHDETVTNDIAKLKEHVKPVIPKYLDEKTFIHLPSGRFVIGGP 244  
Db 202 IPVRHTVLISTQHNDITLEMRRALEQITRAVPAKILDETVYHLPSGRFVIGGP 261

Qy 185 VPVRHTVLISTQHDETVTNDIAKLKEHVKPVIPKYLDEKTFIHLPSGRFVIGGP 244  
Db 202 IPVRHTVLISTQHNDITLEMRRALEQITRAVPAKILDETVYHLPSGRFVIGGP 261

Qy 245 HGDAGLTRKLIIDTYGGWGAHGGAFSGKDPTKVDRGAYIVRQAQSIVASGLARRCI 304  
Db 262 QGDAGVTRKLIIDTYGGWGAHGGAFSGKDPTKVDQDRAAARWVAKSLVKGCRRLV 321

Qy 305 VQSYAIGVPPBSVFDVTGKHDKEILNIVKENFDPRPGMSINIDLKGNNRFL 364  
Db 322 VQSYAIGVAPPLSISIFTGTQSOTERELDVVKHNFDLRPGVTVRDUDLKK--PIYO 378

Qy 365 KTAAYGHFGREDPDTWEVVKPL 387  
Db 379 KTACYGHFGRS--EFPMEVPRKL 399

RESULT 9  
US-09-107-532A-6821  
; Sequence 6821, Application US/09107532A  
; Patent No. 6583275  
; GENERAL INFORMATION:  
; APPLICANT: Lynn A Doucette-Stamm and David Bush  
; TITLE OF INVENTION: NUCLEAR ACID AND AMINO ACID SEQUENCES RELATING TO ENTEROCOCUS FAEVICUM FOR DIAGNOSTICS AND THERAPEUTICS  
; NUMBER OF SEQUENCES: 7310  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: GENOME THERAPEUTICS CORPORATION  
; STREET: 100 Beaver Street  
; CITY: Waltham  
; STATE: Massachusetts  
; COUNTY: USA  
; ZIP: 02454  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: CD/ROM ISO9660  
; COMPUTER: PC  
; OPERATING SYSTEM: <Unknown>  
; SOFTWARE: ASCII  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/107,532A  
; FILING DATE: 30-Jun-1998  
; PRIOR APPLICATION DATA:  
; CURRENT APPLICATION NUMBER: US/09/949,016

RESULT 8  
US-09-949-016-7658  
; Sequence 7658, Application US/09949016  
; Patent No. 6812339  
; GENERAL INFORMATION:  
; APPLICANT: VENTER, J. Craig et al.  
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF  
; FILE REFERENCE: CLO01307  
; CURRENT APPLICATION NUMBER: US/09/949,016

Page 5

APPLICATION NUMBER: 60/085,598  
 FILING DATE: 14 May 1998  
 APPLICATION NUMBER: 60/051,571  
 FILING DATE: July 2, 1997  
 ATTORNEY/AGENT INFORMATION:  
     NAME: Ariniello, Pamela Denette  
     REGISTRATION NUMBER: 40,449  
     REFERENCE/DOCKET NUMBER: GTC-012  
 TELECOMMUNICATION INFORMATION:  
     TELEPHONE: (781) 893-5007  
     TELEFAX: (781) 893-5277  
 INFORMATION FOR SEQ ID NO: 6821:  
     SEQUENCE CHARACTERISTICS:  
         LENGTH: 404 amino acids  
         TYPE: amino acid  
         TOPOLOGY: linear  
         MOLECULE TYPE: protein  
         HYPOTHETICAL: YES  
 ORIGINAL SOURCE:  
     NAME/KEY: misc\_feature  
     LOCATION: (B) LOCATION 1 .. 404  
     SEQUENCE DESCRIPTION: SEQ ID NO: 6821:  
     S-09-107-532A-6821

Query Match	Score	DB	Length	404;
Best Local Similarity	52.9*	Pred. No.	5.66-108;	
Matches	223;	Mismatches	93;	Indels 14; Gaps 5;
y	1 MAETFLFTSEVNEGHPP-KLCDQIISDAVLDACLEBDPPSKVACETCTPNLWNVFGERT 59			
b	7 MYERHLFTSEVSEHRPRIKIAQIISDAILDAALKDFTARVACETSVTTGLVLVFGELIS 66			
y	60 TKANVYDEYEKIVDTCRNIIGFVSNDVGLDADNCKVLYNTEQQSPDIAGYVHGHLTKRP-- 117			
b	67 TTAYVDQKVVRSTIEKGYTRAKPGFGDQDTAAVLVADEQSPPIDQAGYDEAIBRDDEK 126			
y	118 ---EIGAGDQGHMFQGATDETPELMLPLSHVLAATKCARLITEVKNGTCPTKMRDPDGKTQ 172			
b	127 KDVLDDEGAGDCQLMFGRAVDETPELMLPLIALPSHLRYLVRDLAKSNELTYLRPDAKSQ 186			
y	173 VTEVYYNDGAMYPVRTVLSITQHDETVTNDIKAQLEHVKPIVPEKYKLDKTFH 232			
b	187 VTTE-YDDQGQ -- PERVDTIVSTQHDADVNTEIRHDVIEKVVKEVPAELDDQTKVY 243			
y	233 LNPGSGREVTGGPHGDAGL-TGRKLIIIDTYGGWAHGGCAFSGKDPTKDRSGAYTVROAK 292			
b	244 INPTGRVIGGGPQDAGL-TGRKLIVDYGYYARHGGAFSGKDATKDRSASTAARYYAK 303			
y	293 SIVASGLARRCIVQVSAVTAIGVPBPLSVYDTCGTGKIDKEILINIVKENFDPRGMISIN 352			
b	304 NIVAAGLARKAEVQLOVATAIGVAQPVSISINFEGTVEEEELIAAVRENFDLPRAGIEM 363			
y	353 LDLKRGCGNNRFLKTAAYGHEFGREDPDTIWE 382			
b	364 LDLLR--PIYKOTAAHGFGRTDVDLPWE 390			

RESULT 10  
 S-09-543-681A-7130  
 Sequence 7130, Application US/09543681A  
 Patent No. 6605709  
 GENERAL INFORMATION:  
 APPLICANT: GARY BRETON  
 TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PROTEUS  
 FILE REFERENCE: 2709-1002-001  
 CURRENT FILING DATE: 2000-04-05  
 PRIOR APPLICATION NUMBER: US 60/128,706  
 PRIOR FILING DATE: 1999-04-09  
 NUMBER OF SEQ ID NOS: 8344

SEQ ID NO	7130	Query Match	52.1%	Score 1086;	DB 4;	Length 387;
LENGTH:	387	Best Local Similarity	58.2%	Pred. No.	2.6e-106;	
TYPE: PRT		Mismatches	56;			
ORGANISM: <i>Proteus mirabilis</i>		Indels	89;			
US-09-543-681A-7130		Gaps	14;			
		Matches	221;			
		Conservative	56;			
		N mismatches	89;			
		Indels	14;			
		Gaps	6;			
Qy	4	TFLFTSEVNEGHPDKLCDQISDAVLDACLEQDPDSKVACETCTKTNLVMVRGEITTKANV	63			
Db	6	THLFTESEVSEGHPDKIADQISDAVLDACLEQDPDSKVACETCTKTNLVMVRGEITTKANV	65			
Qy	64	VDEYKIVRDTCRNIGFVSNVDGVLDAQNCKVLUVNIEQSPDIAQGVHGHLTKRREEIGAGD	123			
Db	66	VDIBEIRTRKTVREIGYSSDMGFDANSACVISAIGQSPDINQGVD---RADPLEQAGD	122			
Qy	124	QGMFGYATDETPEMLPSHVLATLGARLTENVRKNTCPWLRPGKQTQVTEYYNDNGA	183			
Db	123	QGMFGYATNETDVLMAPTYAHUVQRQAQVRNGTLPMWRPDAKSQITPQYDNNN--	180			
Qy	184	MVPYRVHTVLLISTORDETTNDETAADLKEHVIKPVPEKYLDEKTFLHNPSPGRFYIGG	243			
Db	181	--TIVGDAVLSTIQAEIDISQKDLBAAVMBEBIKPLPTEWINEQTKYPINPGRFTIGG	238			
Qy	244	PHGDAGLTERKIIIDTYGGVGAHGGGAFSGKDPKTVDRGSAAYIVRQAQAKSIVASGLARRC	303			
Db	239	PMGDGLTERKIIIDTYGGVGAHGGGAFSGKDPKTVDRSAAAYAIVRQAQAKNIVAGLADRC	298			
Qy	304	IIVQSYAAGVGPBPPLSVFVDFYGTGKIHDKELIIVKENFDRP-GMTISINLDLKGQQGNR	362			
Db	299	EIQSYAAGVAEPSPSIMVETFGTEKIPTSQQLLVRFFDLRPyGLQM-LDIL--HPI	354			
Qy	363	FLKTAAYGHFGREDDFTVE	382			
Db	355	YQKTAAYGHFGR--ABFPWE	372			
RESULT 11						
US-09-489-039A-11917						
Sequence 11917, Application US/09489039A						
Patent No. 6610836						
GENERAL INFORMATION:						
APPLICANT: Gary Breton et. al						
TITLE OF INVENTION: NUCLEAR ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSI						
TITLE OF INVENTION: PNEUMONIA FOR DIAGNOSTICS AND THERAPEUTICS						
FILE REFERENCE: 2709.2004001						
CURRENT APPLICATION NUMBER: US/09/489,039A						
CURRENT FILING DATE: 2000-01-27						
PRIOR APPLICATION NUMBER: US 60/117,747						
PRIOR FILING DATE: 1999-01-29						
NUMBER OF SEQ ID NOS: 14342						
SEQ ID NO 11917						
LENGTH: 385						
TYPE: PRT						
ORGANISM: Klebsiella pneumoniae						
US-09-489-039A-11917						
Query Match						
Best Local Similarity						
Matches 223; Conservative						
Score 1066.5;						
Pred. No. 1.9e-104;						
Mismatches 54;						
Indels 19;						
Gaps 8;						
Length 385;						
Qy	6	LIFTSEVNEGHPDKLCDQISDAVLDACLEQDPDSKVACETCTKTNLVMVRGEITTKANV	65			
Db	6	LIFTSEVSEGHPDKIADQISDAVLDACLEQDPDSKVACETCTKTNLVMVRGEITTKANV	65			
Qy	66	YEKIVRDTCRNIGFVSNVDGVLDAQNCKVLUVNIEQSPDIAQGVHGHLTKRREEIGAGD	125			
Db	66	IEBIRTRKTVREIGYVHSMDGFDANSACVISAIGQSPDINQGVD---RADPLEQAGDQ	122			
Qy	126	FMGYATNETDVLMAPTYAHUVQRQAQVRNGTLPMWRPDAKSQITPQYDNNN-	185			

Db 123 LMEGYATNETDYLMPAPPVYAHRLVQRQAEVRKNGTLPWLRDAKSOVTFQY-DIGKI- 179 Db 357 LDLKR--PIYRQTSAYGHMGRTDIDLWVE 383

Qy 186 PVRHHTVLSTQDDETVDNDEIADDLREHVIPKRYPLDKTIFHLNPSPRFVGGPH 245

Db 180 -VGIDAVVLSSTQHAEDIDOKSLOBAVNEEIKPILPTEWLNASTKPKINPGRFVGGPM 238

Qy 246 GDAGLTGKRIIIDTYGGGAHGGAFSGSKDPTKVDGSAITYRQAAKSTIVASGLAFLRCIV 305

Db 239 GDGLTGKRIIIDTYGGGAHGGAFSGSKDPTKVDGSAITYRQAAKSTIVASGLAFLRCIV 298

Qy 306 QVSYAIGPEPLSVFDTYGTGKIHDKBILNIVKENFDPR-GMISINLDLKRGGENRFL 364

Db 299 QVSYAIGAEPTSIMVERFGTEKVPSEQLTLVREFDPLRPGLION-LDLI--HPIYK 354

Qy 365 KTAHYGHFGRDDPFTWVKPLKWKXA 392

Db 355 ETAYAIGHGRE-HFPWES---KTDKA 375

RESULT 12

US-09-593-110-2778

; Sequence 2778, Application US/09583110

; Patent No. 6699703

; GENERAL INFORMATION:

; APPLICANT: Lynn Doucette-Stamm et al.

; TITLE OF INVENTION: Nucleic Acid and Amino Acid Sequences Relating to Streptococcus pneumoniae for Diagnostics and Therapeutics

; FILE REFERENCE: PATH00-07A

; CURRENT APPLICATION NUMBER: US/09/583,110

; CURRENT FILING DATE: 2000-05-26

; PRIOR APPLICATION NUMBER: US 09/107,433

; PRIOR FILING DATE: 1998-06-10

; PRIOR APPLICATION NUMBER: US 60/085,131

; PRIOR FILING DATE: 1998-05-12

; PRIOR APPLICATION NUMBER: US 60/051,553

; PRIOR FILING DATE: 1997-07-02

; NUMBER OF SEQ ID NOS: 5322

; SEQ ID NO: 2778

; LENGTH: 396

; TYPE: PRT

; ORGANISM: Streptococcus pneumoniae

US-09-593-110-2778

Query Match Score 1062.5; DB 4; Length 396;

Best Local Similarity 55.9%; Pred. No. 8.4e-104; Mismatches 58; Indels 15; Gaps 5;

Matches 218; Conservative

Qy 1 MAETPLFPTSESYNEGHPKLQDISDAVLDACLEQDPDSKVACETCTKTNLWVFGEITTT 60

Db 1 MSERKLFTSESYSEGHPKIAQDTSDAVLDALAKPAAVAETATTGSHVFGEIST 60

Qy 61 KANDYKEIKVRDTCRNIGEVSNQVGLDADNCVYLVNIEQSPDIAQGVH-----GHLTK 114

Db 61 NAYDINVRDITIAEIGTYNTEGFSAETVGTHPSLVEQGNEALEVRGNADQ 120

Qy 115 RP-EEIGAGDQHMFGYATDETPLMPLSHVATLKGARLTEVKGNCTCPWLRPDGKTV 173

Db 121 DPLDLMGASDQMLMGFAVDETELMPDIAHSKHLVRLAELRKSGEISIURPDAKSQV 180

Qy 174 TVEY-YNDGAMYPPVRYHTVLISTQHDEVTVNDDEIADDLKEHVIKPVYIPEKYLDEKTIHF 232

Db 181 TVEYDENDR---PVRVDTVVISQHDEPEATNEQHQVIDKVIKEYTPSSYLDKTKFF 236

Qy 233 LNPGSRFTTGGPHDAGLTKRKLIDTGGWGHGGFSGKDPTKVRSGAYIVROAK 292

Db 237 INPGRFRVIGPQDGGTGRKLIVDTGGYSSHHGGFSGKDPTKVRDASYYAARYTAK 296

Qy 293 SIVASGLARRCIVOVSYAIGVPEPLSVFDTYGTGKIHDKTDEINVFDFRPGMITSIN 352

Db 297 NIVAGLAKKAEVQLAYAIGVAQSVRIDLFTGTVAESOLEKAQCFDLRPAGIQM 356

Qy 353 LDLKRGNNRNLFLKTAAYSHFGREDPDTFWE 382

Db 357 LDLKR--PIYRQTSAYGHMGRTDIDLWVE 383

RESULT 13

US-09-107-433-2830

; Sequence 2830, Application US/09107433

; Patent No. 6800744

; GENERAL INFORMATION:

; APPLICANT: Lynn A. Doucette-Stamm and David Bush

; TITLE OF INVENTION: NUCLEARIC ACID AND AMINO ACID SEQUENCES RELATING TO STREPTOCOCCUS PNEUMONIAE FOR DIAGNO

; NUMBER OF SEQUENCES: 5206

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: GENOME THERAPEUTICS CORPORATION

; STREET: 100 Beaver Street

; CITY: Waltham

; STATE: Massachusetts

; COUNTRY: USA

; ZIP: 02354

; COMPUTER READABLE FORM:

; MEDIUM TYPE: CD-ROM ISO9660

; COMPUTER: <Unknown>

; OPERATING SYSTEM: <Unknown>

; SOFTWARE: <Unknown>

CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/107,433

; FILING DATE: 30-Jun-1998

PRIOR APPLICATION DATA:

; APPLICATION NUMBER: 60/ 085131

; FILING DATE: May 12, 1998

; APPLICATION NUMBER: 60/051553

; FILING DATE: July 2, 1997

ATTORNEY/AGENT INFORMATION:

; NAME: Arinello, Pamela Deneke

; REGISTRATION NUMBER: 40,489

; REFERENCE/DOCKET NUMBER: GTC-011

TELECOMMUNICATION INFORMATION:

; TELEPHONE: (781)893-5007

; TELEFAX: (781)893-8277

INFORMATION FOR SEQ ID NO: 2830:

SEQUENCE CHARACTERISTICS:

; LENGTH: 405 amino acids

; TYPE: amino acid

; MOLECULE TYPE: Protein

; HYPOTHETICAL: YES

ORIGINAL SOURCE:

; ORGANISM: Streptococcus pneumoniae

FEATURE:

; NAME/KEY: misc feature

; LOCATION: (B) LOCATION 1..405

; SEQUENCE DESCRIPTION: SEQ ID NO: 2830:

US-09-107-433-2830

Query Match Score 1062.5; DB 4; Length 405;

Best Local Similarity 55.9%; Pred. No. 8.7e-104; Mismatches 58; Indels 15; Gaps 5;

Matches 218; Conservative

Qy 1 MAETPLFPTSESYNEGHPKLQDISDAVLDACLEQDPDSKVACETCTKTNLWVFGEITTT 60

Db 10 MSERKLFTSESYSEGHPKIAQDTSDAVLDALAKPAAVAETATTGSHVFGEIST 69

Qy 61 KANDYKEIKVRDTCRNIGEVSNQVGLDADNCVYLVNIEQSPDIAQGVH-----GHLTK 114

Db 70 NAYDINVRDITIAEIGTYNTEGFSAETVGTHPSLVEQGNEALEVRGNADQ 129

Qy 115 RP-EEIGAGDQHMFGYATDETPLMPLSHVATLKGARLTEVKGNCTCPWLRPDGKTV 173

Db 121 DPLDLMGASDQMLMGFAVDETELMPDIAHSKHLVRLAELRKSGEISIURPDAKSQV 180

Qy 174 TVEY-YNDGAMYPPVRYHTVLISTQHDEVTVNDDEIADDLKEHVIKPVYIPEKYLDEKTIHF 232

Db 181 TVEYDENDR---PVRVDTVVISQHDEPEATNEQHQVIDKVIKEYTPSSYLDKTKFF 236

Qy 233 LNPGSRFTTGGPHDAGLTKRKLIDTGGWGHGGFSGKDPTKVRSGAYIVROAK 292

Db 237 INPGRFRVIGPQDGGTGRKLIVDTGGYSSHHGGFSGKDPTKVRDASYYAARYTAK 296

Qy 293 SIVASGLARRCIVOVSYAIGVPEPLSVFDTYGTGKIHDKTDEINVFDFRPGMITSIN 352

Db 297 NIVAGLAKKAEVQLAYAIGVAQSVRIDLFTGTVAESOLEKAQCFDLRPAGIQM 356

Qy 353 LDLKRGNNRNLFLKTAAYSHFGREDPDTFWE 382

Db 357 LDLKR--PIYRQTSAYGHMGRTDIDLWVE 383

RESULT 14

US-09-107-433-2830

; Sequence 2830, Application US/09107433

; Patent No. 6800744

; GENERAL INFORMATION:

; APPLICANT: Lynn A. Doucette-Stamm and David Bush

; TITLE OF INVENTION: NUCLEARIC ACID AND AMINO ACID SEQUENCES RELATING TO STREPTOCOCCUS PNEUMONIAE FOR DIAGNO

; NUMBER OF SEQUENCES: 5206

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: GENOME THERAPEUTICS CORPORATION

; STREET: 100 Beaver Street

; CITY: Waltham

; STATE: Massachusetts

; COUNTRY: USA

; ZIP: 02354

; COMPUTER READABLE FORM:

; MEDIUM TYPE: CD-ROM ISO9660

; COMPUTER: <Unknown>

; OPERATING SYSTEM: <Unknown>

; SOFTWARE: <Unknown>

CURRENT APPLICATION DATA:

; APPLICATION NUMBER: US/09/107,433

; FILING DATE: 30-Jun-1998

PRIOR APPLICATION DATA:

; APPLICATION NUMBER: 60/ 085131

; FILING DATE: May 12, 1998

; APPLICATION NUMBER: 60/051553

; FILING DATE: July 2, 1997

ATTORNEY/AGENT INFORMATION:

; NAME: Arinello, Pamela Deneke

; REGISTRATION NUMBER: 40,489

; REFERENCE/DOCKET NUMBER: GTC-011

TELECOMMUNICATION INFORMATION:

; TELEPHONE: (781)893-5007

; TELEFAX: (781)893-8277

INFORMATION FOR SEQ ID NO: 2830:

SEQUENCE CHARACTERISTICS:

; LENGTH: 405 amino acids

; TYPE: amino acid

; MOLECULE TYPE: Protein

; HYPOTHETICAL: YES

ORIGINAL SOURCE:

; ORGANISM: Streptococcus pneumoniae

FEATURE:

; NAME/KEY: misc feature

; LOCATION: (B) LOCATION 1..405

; SEQUENCE DESCRIPTION: SEQ ID NO: 2830:

US-09-107-433-2830

Query Match Score 1062.5; DB 4; Length 405;

Best Local Similarity 55.9%; Pred. No. 8.7e-104; Mismatches 58; Indels 15; Gaps 5;

Matches 218; Conservative

Qy 1 MAETPLFPTSESYNEGHPKLQDISDAVLDACLEQDPDSKVACETCTKTNLWVFGEITTT 60

Db 10 MSERKLFTSESYSEGHPKIAQDTSDAVLDALAKPAAVAETATTGSHVFGEIST 69

Qy 61 KANDYKEIKVRDTCRNIGEVSNQVGLDADNCVYLVNIEQSPDIAQGVH-----GHLTK 114

Db 70 NAYDINVRDITIAEIGTYNTEGFSAETVGTHPSLVEQGNEALEVRGNADQ 129

Qy 115 RP-EEIGAGDQHMFGYATDETPLMPLSHVATLKGARLTEVKGNCTCPWLRPDGKTV 173

Db 121 DPLDLMGASDQMLMGFAVDETELMPDIAHSKHLVRLAELRKSGEISIURPDAKSQV 180

Qy 174 TVEY-YNDGAMYPPVRYHTVLISTQHDEVTVNDDEIADDLKEHVIKPVYIPEKYLDEKTIHF 232

Db 181 TVEYDENDR---PVRVDTVVISQHDEPEATNEQHQVIDKVIKEYTPSSYLDKTKFF 236

Qy 233 LNPGSRFTTGGPHDAGLTKRKLIDTGGWGHGGFSGKDPTKVRSGAYIVROAK 292

Db 237 INPGRFRVIGPQDGGTGRKLIVDTGGYSSHHGGFSGKDPTKVRDASYYAARYTAK 296

Qy 293 SIVASGLARRCIVOVSYAIGVPEPLSVFDTYGTGKIHDKTDEINVFDFRPGMITSIN 352

Db 297 NIVAGLAKKAEVQLAYAIGVAQSVRIDLFTGTVAESOLEKAQCFDLRPAGIQM 356

Qy 353 LDLKRGNNRNLFLKTAAYSHFGREDPDTFWE 382

Db 357 LDLKR--PIYRQTSAYGHMGRTDIDLWVE 383

Db	190	TVEYDENDR --- PVRVDTVVISTQHDPEATNEQHQDVIDKVIKEVIPSSYYLDKTCKF	245
Qy	233	LNPSSGRFVGGPHGDAGITGRKIIIDTGYGWAHGGAFSGKDPTKVDRSGAYIVRQAQK	292
Db	246	INPTGRFVGGPGQSGLGRKIIIDTGYGSRHGGAFSGKDPTKVDRSASYARYIAK	305
Db	293	SIVASGLARRCIVQSYAIGVPEPLISVFVDTYTGKTHDEBILNWKENDFRPMISIN	352
Qy	306	NIVAGLAKKAEVQLAYAIGVAQPSVSVIDTFTGCTVAESOLEXAKARQIFDLRPGIQQM	365
Qy	353	LDLKRGGNNRFLKTAIGHGFREDDPFTW	382
Db	366	LDLKR --- PIYRQTSAYGMGRTDLDPWE	392
<b>RESULT 14</b>			
	US-09-273-686-2		
	; Sequence 2, Application US/09273686		
	; Patent No. 6228625		
	; GENERAL INFORMATION:		
	; APPLICANT: Zelacain, Magdalena		
	; APPLICANT: Burham, Martin K. R.		
	; APPLICANT: Biswas, Sanjoy		
	; APPLICANT: Brown, James		
	; APPLICANT: Ingraham, Karen, A.		
	; APPLICANT: Chalker, Alison F.		
	; APPLICANT: So, Chi Y.		
	; APPLICANT: Holmes, David J.		
	; APPLICANT: Van Horn, Stephanie		
	; APPLICANT: Warren, Richard L.		
	; TITLE OF INVENTION: metK		
	; FILE REFERENCE: GM10176		
	; CURRENT APPLICATION NUMBER: US/09/273, 686		
	; CURRENT FILING DATE: 1999-03-22		
	; EARLIER APPLICATION NUMBER: 60/106, 767		
	; EARLIER FILING DATE: 1998-11-03		
	; NUMBER OF SEQ ID NOS: 3		
	; SOFTWARE: FastSEQ for Windows Version 3.0		
	; SEQ ID NO: 2		
	; LENGTH: 396		
	; TYPE: PRT		
	; ORGANISM: Streptococcus pneumoniae		
	US-09-273-686-2		
Query Match			
Best Local Similarity	51.0%	Score 1061.5;	DB 3;
Matches	55.9%	Pred. No. 1.1e-103;	Length 396;
218; Conservative	58;	Mismatches 99;	Indels 15;
		Gaps 5;	GapS 5;
Qy	1	MADTFELFTSEVNEGHDPKLQDQLSAVIDACLGDPDSKVACETCTKTNLVMVGEITT	60
Db	1	MSPERKLFTSEVSGHDKIADQISDAILDAILAKDPEAHVAAETAVYTCSVAVGEIST	60
Qy	61	KANVDEYKIVRDTCRNIQEVSNVDGLADANCKVLWNIEQSPDIAQGVH-----GHLTK	114
Db	61	NAYVDDINERVVRDTLAEIGYNTTEGFSAAETVGVHESLVEQSPDIAQGVNAELEVRGNADQ	120
Qy	115	RP-BEIGAGDQGMFGYATDETPEMLPLSHVLTATKLGEVKNGTCPWLPRGKTV	173
Db	121	DPLDLIGDQGLMFGFAVDETEELMPLPIALSKLIRRLLAEKLKGSEISYLRPDAKSQV	180
Qy	174	TVEY-YNDGAMYVVRVHTVLIISTQHDETVNDEAADJKEHVTPVPIKYLDKTIIFH	232
Db	181	TVEYDENDR --- PVRVDTVVISTQHDPEATNEQHQDVIDKVIKEVIPSYYLDKTCKF	236
Qy	233	LNPSSGRFVGGPHGDAGITGRKIIIDTGYGWAHGGAFSGKDPTKVDRSGAYIVRQAQK	292
Db	237	INPTGRFVGGPGDSGITGRKIIIDTGYGSRHGGAFSGKDPTKVDRSASYARYIAK	296
Qy	293	SIVASGLARRCIVQSYAIGVPEPLISVFVDTYTGKTHDEBILNWKENDFRPMISIN	352
Db	297	NIVAGLAKKAEVQLAYAIGVAQPSVSVIDTFTGCTVAESOLEXAKARQIFDLRPGIQQM	356
Qv			

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